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Foreign Direct Investment in the U.S. Minerals Industry

By Louis J. Sousa, Elizabeth H. Yaremchuk, and Annette P. Graham



UNITED STATES DEPARTMENT OF THE INTERIOR

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Donald Paul Hodel, Secretary

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UNIT OF MEASURE ABBREVIATIONS USED IN THIS REPORT

mt
MW
pct

metric ton
megawatt
percent

st
tr oz
yr

short ton
troy ounce
year

FOREIGN DIRECT INVESTMENT IN THE U.S. MINERALS INDUSTRY

By Louis J. Sousa,¹ Elizabeth H. Yaremchuk,² and Annette P. Graham¹

ABSTRACT

This Bureau of Mines report examines aggregate trends in foreign direct investment in the U.S. mining and mineral processing industries between 1977 and 1984, and provides an analysis of foreign investment in several major mineral commodity industries.

In 1984, 11.1 pct of total employment in the U.S. minerals industry was at firms that were U.S. affiliates of foreign firms. In 1985, the proportion of U.S. capacity held by foreign investors in nine major mineral commodity industries was as follows: steel, 5 pct; silver, 16 pct; lead, 18 pct; aluminum, 25 pct; zinc, 26 pct; copper, 30 pct; cement, 32 pct; gold, 44 pct; and ferroalloys, 56 pct. Almost 90 pct of the total foreign investment in the U.S. minerals industry was accounted for by eight countries—Canada, the United Kingdom, France, Federal Republic of Germany, Switzerland, Japan, Australia, and the Republic of South Africa. The most fundamental reason behind the growth in foreign investment in the U.S. minerals industry has been that an increasing proportion of U.S. mineral firms and assets have been for sale, while foreign mineral companies have been the ones most willing and able to purchase these firms and/or their assets. While the growth in foreign ownership in the minerals industry has not been without controversy, it has helped save jobs, reduce the minerals trade deficit, and—from the national defense perspective—maintain the Nation's overall mineral and metal self-sufficiency at reasonably high levels. In the absence of domestic buyers, foreign investors have helped to maintain a viable domestic minerals industry.

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INTRODUCTION

This Bureau of Mines study examines aggregate trends in foreign direct investment¹ in the U.S. mining and mineral processing industries between 1977 and 1984, provides an analysis of foreign investment in several major mineral commodity industries, and presents data indicating the domicile country of foreign investors in U.S. mineral assets. The study also traces foreign investment in U.S. mineral assets back to the ultimate beneficial owner using publicly available data.

The primary objective of the study was to provide data that depict trends in and the current status of foreign investment in the domestic mineral industries; beyond a limited discussion, it did not, however, examine in detail the factors that have contributed to the growing role of foreign investors in these industries. Nor did it evaluate in depth the potential advantages or liabilities of this activity. In other words, the study was designed primarily to pro-

vide many of the previously unassembled facts needed to help focus and clarify policy dialogue on the foreign investment issue.

Two major sources of information were used in the preparation of this report. A large and valuable data base developed by the Commerce Department's Bureau of Economic Analysis was used to help measure aggregate trends in foreign investment in the minerals industry. Data for the more detailed examination of foreign investment in specific mineral commodity industries, on the other hand, were developed through an extensive search of industry and trade literature, various corporate directories, and company annual reports. The tabulations developed from the literature search were reviewed and supplemented with additional data provided by Bureau of Mines commodity specialists.

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Woodbury (lead), James Jolly (zinc), John Lucas (gold), and Robert Reese (silver), all physical scientists in the Division of Nonferrous Metals, Washington, DC; and Wilton Johnson (cement), mineral specialist in the Division of Industrial Minerals, Washington, DC. The authors would also like to thank Ned Howenstine and R. David Belli, international economists in the International Investment Division, Bureau of Economic Analysis, U.S. Department of Commerce, Washington, DC, for supplying much of the statistical data used in the report, and George Watson, president of the Ferroalloy Association, Washington, DC, for his assistance in coverage of the ferroalloy industry.

PRINCIPAL FINDINGS

AGGREGATE MEASURES OF FOREIGN INVESTMENT IN THE U.S. MINERALS INDUSTRY

As noted in table 1, between 1977 and 1984 the number of non-bank U.S. affiliates⁴ of foreign investors in the economy as a whole more than doubled (from 4,046 to 9,630) as did employment at these affiliates (from 1.2 million workers to 2.7 million). During this same time period, the total value of assets at all U.S. affiliates in the economy rose from \$143 billion to \$387 billion (1977 constant dollars).

Foreign investment in the domestic minerals industry also grew substantially during the 1977-84 time period as the number of U.S. affiliates in the minerals industry increased by 65 pct (from 125 to 206) between 1977 and 1984.

¹Foreign direct investment in the United States is defined in this report as ownership or control, directly or indirectly, by a foreign person or entity of 10 pct or more of the voting securities of a U.S. business enterprise. The reader is referred to appendix C for the definition of several similar technical terms used in this report.

⁴A U.S. affiliate is a business enterprise in which at least 10 pct or more of its voting securities are directly or indirectly owned or controlled by a foreign person or entity.

During the same period, employment at all U.S. affiliate mineral operations in this country increased by 61 pct. The rate of increase in foreign investment in U.S. mineral assets was slightly higher in the metals industries than in the non-metallic groups.

Table 1.—Summary of selected data on the growth of foreign investment in U.S. industries

	All industries ¹	Metal mining, metals (SIC 10, 33)	Nonmetallics (SIC 14, 32)	Total, minerals industry
Affiliates:				
1977.....10 ⁶ \$..	4,046	68	57	125
1984.....10 ⁶ \$..	9,630	114	92	206
1977-84 change .pct..	138	68	61	65
Total assets²:				
1977.....10 ⁶ \$..	143,488	6,166	3,692	9,858
1984.....10 ⁶ \$..	386,768	12,694	6,082	18,776
1977-84 change .pct..	170	106	65	90
Employment:				
1977.....10 ³ ..	1,219	69	42	111
1984.....10 ³ ..	2,715	107	71	179
1977-84 change .pct..	123	55	69	61

¹Except banking (SIC 60).

²1977 constant dollars.

Source: U.S. Department of Commerce, Bureau of Economic Analysis. See table A-1 for specific publications.

Table 2.—Intensity of foreign investment in the U.S. minerals and other industries: employment as an indicator

	All industries ¹	Mining and manufacturing ²	Minerals industry ³
Total employment, 10 ³ :			
1977	90,660	20,495	2,057
1984	103,331	419,454	1,614
Employment at U.S. affiliate firms:			
1977	1,219	764	111
1984	2,715	41,430	179
Share of 1977 total	1.3	3.7	5.4
Share of 1984 total	2.6	47.4	11.1

¹Except banking (SIC 60).

²SIC groups 10 through 14 and 20 through 39.

³SIC groups 10, 14, 32, and 33.

⁴1983.

Sources: Economic Report of the President, Feb. 1985; Supplement to Employment and Earnings, July 1984, Bureau of Labor Statistics, U.S. Department of Labor; and U.S. Department of Commerce, Bureau of Economic Analysis.

Perhaps a more useful way of evaluating the growth in foreign investment is to analyze growth in the "intensity" of foreign investment, i.e., changes in the proportion of total industry assets held by foreign investors. Unfortunately, insufficient and/or inadequate data on total industry assets prevented the development of such a measure. Thus, as an alternative indicator of relative differences in the intensity of foreign investment, employment data were used.

For example and as noted in table 2, the 179,000 minerals industry workers employed at U.S. affiliate companies in 1984 accounted for 11.1 pct of total employment in this sector of the economy. In comparison, for the mining and manufacturing sectors of the economy as a whole, 7.4 pct of all workers were employed at U.S. affiliate firms in 1983, while for the total economy, 2.6 pct of the entire civilian employed workforce worked at U.S. affiliate firms in 1984. Thus, using employment as an indicator, foreign investment seemed more prevalent in the minerals industry than in most other industries as about one worker in nine in the minerals sector was employed at a U.S. affiliate firm in 1984. It is of further interest to note that at each of these three levels of aggregation—the minerals industry, the goods producing sectors, and the economy as a whole—the intensity of foreign investment (as reflected by employment) approximately doubled between 1977 and 1984.

FOREIGN INVESTMENT IN THE U.S. MINERALS INDUSTRY AT THE TWO-DIGIT SIC LEVEL

Disaggregating the minerals industry as a whole into its major component industries revealed a rather broad divergence in the intensity of foreign investment⁴ among these industries. While manufacturing segments within the minerals sector, i.e., SIC groups 32 and 33, accounted for the majority of employees and assets at U.S. affiliate firms, the intensity of foreign investment was highest in the mining (i.e., SIC 10 and 14) segments of the sector.

In metal mining, U.S. affiliate firms accounted for 26 pct of the industry's total property, plant, and equipment (PPE) and 21 pct of the industry's employment in 1982.⁶ Within the iron ore industry, the degree of foreign involvement was even higher; 33 pct of all PPE and employees in the iron ore industry were employed at U.S. affiliate firms.

In the primary metals industries, foreign investors showed an apparent preference for nonferrous metals as opposed to steel companies.⁷ For example, while only 5 pct of steel industry PPE belonged to U.S. affiliate firms, the corresponding figure in nonferrous metals was 17 pct. For the metals industries as a whole, U.S. affiliate firms accounted for 9 pct of the industries' PPE. Employment patterns at U.S. affiliate metals firms in the United States closely followed those for PPE.

In nonmetallic mineral mining, 27 pct of the industry's PPE was held by U.S. affiliate firms while only 7 pct of the industry's employment was at U.S. affiliate firms. Similarly, in the manufacturing segment of this industry (i.e., SIC 32—stone, clay, and glass products), 15 pct of all PPE assets were held by U.S. affiliate firms while only 8 pct of

⁴In contrast to higher levels of aggregation, it was possible to develop asset-based comparisons of foreign investment intensity at the two-digit level of industry classification by using Bureau of the Census data on property, plant, and equipment. In the capital- and equipment-intensive minerals industry, such assets typically account for at least two-thirds of total assets.

⁶1982 was used in this table because it was the latest year in which comprehensive data on PPE in the minerals industry was available.

⁷Through 1983. Over the last couple of years, however, foreign investors have shown an increased interest in U.S. steel facilities, particularly fabrication plants.

Table 3.—Selected data on foreign investment in the U.S. minerals industry, 1982

Industry segment	PPE, 10 ⁶ \$		PPE at U.S. affiliates, pct of total	Employment		Employment at U.S. affiliates, pct of total
	At U.S. affiliates	Total ¹		At U.S. affiliates	Total	
Metal mining:						
Iron ore	1,433	4,354	33	3,950	11,900	33
Other	2,435	10,335	24	11,210	61,900	19
Total	3,868	14,689	26	15,160	73,800	21
Primary metals:						
Ferrous	2,511	50,155	5	21,732	553,000	4
Nonferrous	4,223	25,010	17	48,068	369,000	13
Total	6,735	75,165	9	69,800	922,000	8
Nonmetallic minerals, except fuels	3,958	14,600	27	7,275	111,100	7
Stone, clay, and glass products	4,467	29,225	15	46,621	577,800	8
Grand total ²	19,028	133,679	14	138,856	1,684,700	8

PPE: Gross book value of property, plant, and equipment, end of year.

¹Some data are based on sample estimates.

²Data may not add to totals shown owing to independent rounding.

Sources: 1982 Census of Manufacturing (various issues) and 1982 Census of the Mineral Industries (various issues), Bureau of the Census, U.S. Department of Commerce; Bureau of Economic Analysis, U.S. Department of Commerce; and Supplement to Employment and Earnings, 1909–1978, Revised Establishment Data, Bureau of Labor Statistics, U.S. Department of Labor.

the industry's employees worked for U.S. affiliate companies.

It should be noted that for all the mineral industry groups analyzed, asset-based measures of foreign investment intensity were somewhat higher than those based on employment data. This would seem to indicate that foreign investment has generally been concentrated in the more capital intensive (and presumably larger) firms. If this situation prevails throughout the economy, the employment-based measures of foreign investment for the goods sectors and the economy as a whole (cited previously) probably understate somewhat the actual proportion of U.S. industrial assets owned by foreigners.

FOREIGN INVESTMENT IN THE U.S. MINERALS INDUSTRY AT THE FOUR-DIGIT SIC LEVEL

Because of the lack of sufficient industry-specific data in the Commerce Department's foreign investment data base, a different approach was required in order to examine in greater detail the degree of foreign investment in individual commodity industries. Hence, using a "bottom up" approach, data were developed from numerous published sources such as trade literature, company annual reports, and various corporate directories. From this data, foreign investment in individual mineral producing companies was ascertained.⁸ This data, in turn, provided the basis for determining the proportion of U.S. capacity held by foreign investors in specific mineral commodity industries (i.e., at the four-digit SIC level) in 1985. Using this approach revealed that, in the nine major mineral and metal commodity industries analyzed, foreign investment intensity ranged from a low of 5 pct in the steel industry to a high of 56 pct in the ferroalloys industry, as summarized in table 4.

Foreign investors own at least 10 pct of the stock of companies possessing about 13.4 million st steel capacity. Prorating this capacity based on the number of shares of voting stock held yielded an equivalent foreign investor-held steel capacity of 7.1 million st, only about 5 pct of the U.S. total. Most foreign investment in U.S. steel companies has been in non-integrated minimill and specialty steel producers, though Japan's Nippon Kokan K.K. has a 50-pct interest in the 4.9 million st integrated capacity held by National Steel. While foreign firms have largely avoided investing heavily in the hot metal end of the steel business, recently they seem to have been increasing their stake in steel fabrication assets (though no data have been assembled here in order to quantify this development).

Of those commodities studied, foreign investment intensity was highest in the tonnage ferroalloy industry (i.e., chromium, manganese, and silicon ferroalloys and metals). In this industry, foreign investors hold the equivalent of 56 pct of the total active capacity in this country. Moreover, it should be noted that total capacity in the ferroalloy industry has declined sharply over the past several years as imported ferroalloys have captured an ever increasing share of the domestic market. Hence, the collective role of U.S. owned firms as a source of supply of these strategic materials has been reduced considerably.

The bottom up foreign investment analysis further confirmed that foreign investment in the major U.S. nonferrous metal industries has been more extensive than in the steel industry. For example, in the U.S. aluminum industry foreign investors hold the equivalent of 1.34 million st of

Table 4.—Proportion of U.S. capacity held by foreign investors in selected U.S. mineral and metal commodity industries, 1985,¹ percent

Industry	
Ferrous metals:	
Steel	5
Ferroalloys	56
Nonferrous metals:	
Aluminum smelting	25
Copper mining	30
Gold mining	44
Lead mining	18
Silver mining	16
Zinc mining	26
Industrial minerals: Cement	32

¹Prorated based on percent of voting securities held in U.S. operating firms by foreign investors.

primary smelting capacity—a quarter of the country's total. About one-third of foreign-held aluminum capacity was acquired within the past 2 yr by Nippon Kokan, Alcan (of Canada), and CRA (of Australia). As in steel, the purchase of fabrication and marketing assets is believed to have been an important factor in these acquisitions.

Of the four tonnage nonferrous metal industries analyzed, foreign investment is highest in copper—30 pct of U.S. copper mining capacity is foreign held. Because of the extremely difficult times that they have faced over the last several years, domestic copper firms have often sought foreign business partners as a means of sharing risk and gaining access to much needed capital. Hence, most of the major companies in the domestic industry including Kennecott, Phelps Dodge, Newmont, ASARCO, and Inspiration have come under some degree of foreign control as overseas investors have acquired interests in these firms.

Foreign investment in lead mining amounts to 18 pct of U.S. capacity, somewhat lower than the degree of foreign investment in the other tonnage nonferrous metal industries. This is primarily because foreign investors have not acquired a significant interest in the largest U.S. producer, Fluor/St. Joe. In zinc, foreign investors hold the equivalent of 26 pct of U.S. mining capacity. Slightly over half of all foreign investment in U.S. zinc mining capacity is accounted for by Société Générale de Belgique's ownership of the Jersey Minière Zinc Co., operator of the large Elmwood-Gordonsville Mine.

Overseas investment in U.S. silver capacity apparently is not quite as extensive as in most of the other mineral commodity industries analyzed—foreign investors hold the equivalent of 16 pct of total domestic mining capacity in this metal. In the case of gold, on the other hand, a recent surge in interest in gold properties in the United States by a number of small and largely Canadian companies has sharply increased the role of foreign firms in this domestic industry. At the end of 1985, at least 44 pct of U.S. gold mining capacity was owned by U.S. affiliates of foreign firms. Moreover, in contrast to the other commodities analyzed, it is possible that a lack of complete information on ownership of U.S. gold (and possibly silver) properties may have resulted in the understatement of the degree of foreign investment in U.S. capacity to produce these precious metals.

Finally, in cement, the only industrial mineral industry analyzed, a wave of foreign acquisitions in recent years has driven the foreign-owned share of U.S. capacity to 32 pct. Unlike the metals, where overseas investors seem to prefer a partnership or minority interest role, in cement the available information seems to indicate that foreign investors find the wholly owned subsidiary route more attractive.

⁸See, for example, tables A-2 through A-11.

FOREIGN INVESTMENT IN THE U.S. MINERALS INDUSTRY BY DOMICILE COUNTRY

While the Bureau of Economic Analysis (BEA) data base is useful in analyzing aggregate measures of foreign investment, it is considerably less helpful in determining the domicile country⁹ of ownership of U.S. minerals industry assets. This is mainly due to disclosure problems; that is, in many instances detailed data could not be published because it would reveal proprietary information about individual companies. Table 5 contains the BEA data on foreign investment in the U.S. minerals industry by domicile country in 1984 (the latest year available) and, as noted, much of the information had to be withheld.

One interesting point that the BEA data do not confirm is that over 73 pct of the total foreign investment in the U.S. minerals industry is accounted for by Canada, four West European countries—the United Kingdom, France, Federal Republic of Germany, and Switzerland—and Japan. The data further indicate that investors in Australia and the Republic of South Africa account for an additional 15 pct of total foreign investment in the minerals sector. Thus, it is estimated that these eight countries alone account for almost 90 pct of all foreign investment in the minerals industry in the United States.

Table 5.—Foreign investment in the U.S. minerals industry, by domicile country, 1984, million dollars

Domicile country ¹	Metal mining	Nonmetallic minerals, except fuels	Primary metals	Stone, clay, and glass products	Total
Canada	1,651	W	2,849	W	6,167
Latin America	5	2	W	0	W
France	W	0	772	2,303	W
Germany, Fed. Rep. of	W	W	698	443	1,735
Netherlands	0	0	13	17	30
Switzerland	0	W	W	403	1,451
United Kingdom	0	W	W	2,521	5,116
Other Europe	W	W	W	350	W
Total Europe	583	908	6,196	6,037	13,724
Japan	0	W	3,623	39	W
Australia ² and Republic of South Africa	W	W	W	221	4,296
Middle East	W	0	W	8	528
Other	5	2	73	W	W
Grand total	3,903	1,365	15,671	8,013	28,952

W Withheld to avoid disclosing proprietary data.

¹Location of the home office of the ultimate beneficial owner.

²Includes New Zealand.

Source: Bureau of Economic Analysis, U.S. Department of Commerce.

BEHIND THE GROWTH IN FOREIGN INVESTMENT IN THE U.S. MINERALS INDUSTRY

Because of the magnitude of foreign investment in the U.S. minerals industry as well as the fundamental role that mining and metals companies have traditionally occupied in supporting the Nation's industrial base and national defense, the growth in foreign investment in these industries that has occurred over the last decade has become a subject of increasing public policy debate. Reasons sometimes cited in attempts to explain the underlying causes of the growth in foreign ownership and investment in the minerals sector have been numerous and are briefly discussed in this section.

THE RETURN OF EXPATRIATE CAPITAL

At the macroeconomic level, the expanding foreign investment in U.S. firms as a whole (including minerals companies) has been a natural outgrowth of changes in international trade between the United States and other countries. The recent large trade deficits have created substantial foreign ownership of U.S. dollars. For a number of reasons, much of this capital has been invested in the United States through the purchase of both debt and equity holdings in U.S. companies.

DOMESTIC MINERALS COMPANIES AND ASSETS FOR SALE

Perhaps the most fundamental reason behind the growth in foreign investment in the U.S. mineral industries (particularly since 1981) has been that an increasing pro-

portion of U.S. mineral firms and assets have been for sale while foreign mineral companies have been the ones most willing and able to purchase these firms and/or their assets.

Largely because of the numerous and severe competitive difficulties that they have faced over the last several years, domestic commodity mineral producers have experienced reduced profits (or even losses) and growing debt. In some instances they have surrendered their autonomy as independent companies in return for continued survival as an affiliate (or joint venture partner) of another, more prosperous firm, regardless of its nationality.

When U.S. mineral companies have not been acquired outright, they have often sought to divest themselves of selected mineral or metal assets either to (1) rid themselves of high-cost operations, (2) reduce their debt, or (3) reposition themselves by redeploying their capital—often into more sophisticated, specialized, highly value-added product lines. In selling their assets, U.S. mineral companies have often noted a shortage of sufficiently interested and/or able domestic buyers.

A few foreign acquisitions occurred after Federal agencies had determined that certain proposed or completed mergers violated antitrust laws. In one recent example of this type of activity, Kemira Oy of Finland bought the titanium dioxide plants of American Cyanamid Co. after the purchase of that company's plants by NL Industries had been opposed by the Federal Trade Commission. In another instance, Nippon Kokan of Japan bought 50 pct of National Steel after the Justice Department had disallowed a bid by U.S. Steel.

In effect, the recent sale of U.S. minerals assets to foreign owners has been a symptom of an apparent industrial megatrend: the movement of U.S. capital away from commodity industries and toward those with more highly specialized products.

⁹Defined as the country in which the home office of the ultimate beneficial owner is located.

FOREIGN COMPANIES BUY INTO THE U.S. MARKET

Many foreign minerals firms have fared somewhat better than their U.S. counterparts over the last several years, and have emerged from the period with stronger balance sheets and seemingly less disillusionment with the commodity minerals and metals business. Indeed, like foreign firms in other industries, they have been interested in further expanding their world market shares by purchasing U.S. mineral companies or assets as they have come up for sale. And these foreign companies often have been in a good position to do so.

Despite recent slowing in the growth in demand for many minerals in the United States, the U.S. economy is still the largest in the world. Hence, in the aggregate, the U.S. market is still the world's largest consumer of many commodity minerals and metals. Even during recessionary periods the U.S. proportional share of world consumption of most commodities remains relatively large. Foreign companies desiring to expand their overseas sales consider investing in the United States because of the sheer magnitude of this country's demand for minerals. There are several reasons why the purchase of a U.S. firm is an expeditious method of improving market share in this—the world's largest—economy.

For example, both Alcan (Canada) and Comalco (Australia) viewed the acquisition of aluminum fabrication assets in the United States as a means of securing an important outlet for aluminum ingot produced at their own domestic smelters. In so doing, these companies were, in effect, buying directly into the critically important marketing end of the aluminum business, and thus they were able to acquire the channels through which to sell aluminum produced abroad in a highly competitive environment.

Furthermore, by acquiring a U.S. affiliate, foreign firms are able to avoid certain tariffs on items shipped from their facilities abroad (exported) to these U.S. affiliates for further processing. In addition, by acquiring capacity in this country, mineral and metal producers come to be viewed as a more stable supplier by manufacturing firms that purchase these materials.

The magnitude of U.S. mineral resource potential has been another reason that foreign firms (especially relatively resource-deficient Japanese and European companies) have invested in the United States. Particularly in the late 1960's and 1970's, U.S. mineral companies were attractive to foreign investors because they were viewed in a manner similar to that of oil companies. They were perceived to possess good future earnings potential because of the depleting nature of mineral resources. Although this view is not as prevalent today, the purchase of in situ U.S. mineral assets often has been viewed as a sound long-term investment.

Foreign firms also have invested in U.S. companies to help assure themselves of a continued presence in the large U.S. market during a period of uncertainty marked by grow-

ing protectionist sentiment. Japanese firms, in particular, seem to have responded to this concern. The ability of Japanese companies to provide products to U.S. consumers at competitive prices has eroded the U.S. producers' market share in numerous products and has contributed to the growing trade deficit with Japan. As a result, many competing U.S. producers have sought trade restrictions on Japanese products, and the Japanese are concerned that the tide of U.S. protectionism could spread and restrict their presence in the U.S. market.

Finally, the stable political environment of the United States has offered another strong attraction for foreign capital. While costly U.S. Government regulations may deter foreign investment in the United States, more often such regulations have been viewed with less concern than the potential whim of government officials serving as board members in a joint government-private sector enterprise, as might be the case in many other countries. In addition, the U.S. economy is one of the strongest in the world and, in contrast to numerous other Western economies, the U.S. economy seems much more securely embarked on a new secular path of growth.

FEW HOSTILE FOREIGN ACQUISITIONS

Despite the large number of foreign acquisitions of U.S. mineral firms, there have been only a few reported hostile takeover attempts by overseas investors. In the only known major hostile foreign takeover action to be successfully executed, the management of Gulf Resources and Chemicals Co. (the major producer of lithium in the United States) was challenged by the British financier Alan E. Clore, a holder of 25 pct of Gulf Resources stock. He assumed control of the company after a proxy vote in 1981.¹⁰

St. Joe Minerals Co., a major producer of lead and zinc, was the object of another hostile foreign takeover attempt in 1980 by the Seagrams Co. of Canada. St. Joe's major objection to the Seagrams offer was that the Canadian firm was not involved in the minerals business and, therefore, would not be sufficiently sensitive to the company's needs. Eventually, St. Joe was acquired by the Fluor Corp., a U.S. company. ASARCO has also been subjected to a hostile foreign takeover campaign; thus far, however, ASARCO has managed to resist the unwanted acquisition through the repurchase of stock.

Aside from these few known instances, U.S. mineral companies have generally changed hands with the mutual consent of both parties. Nonetheless, as in any perceived hostile takeover attempt—domestic or foreign—executives and others in the target firm may feel that they have much to lose by such an action. Hence, they will often go to great lengths to abort the unwanted takeover attempt. It is from such actions that much of the debate over the foreign ownership issue probably originates.

¹⁰Clore subsequently sold most of his interests in Gulf to FMC Corp. in 1985.

CURRENT POLICY AND ISSUES

The growth of foreign investment in domestic mineral and other firms has stimulated a great deal of interest in existing U.S. policy toward foreign investment and raised a number of issues of concern to be considered as future policy toward foreign investment evolves.

CURRENT POLICY

For the most part, the United States does not impose special restrictions on foreign investment here. Rather, this country generally attempts to promote an investment climate open to anyone wishing to conduct business in the United States. Therefore, U.S. subsidiaries of foreign companies are incorporated under U.S. laws, and are generally granted the same privileges extended to and assume the same responsibilities of any U.S. corporation.

The Mining Law of 1872 permits ownership of leases and claims on federally administered lands by all U.S. citizens and corporations, regardless of the nationality of the stockholders of the company—with one exception. Under the Minerals Leasing Act of 1920, if the majority of the stockholders of U.S. corporations are of a country that does not allow equal access to U.S. interests in the foreign country they represent (i.e., if reciprocal investment agreements do not exist), then the foreign-held U.S. subsidiary may be denied access to mineral rights on federally administered lands. In practice, however, only one country has been denied access to mineral leases and mining claims because it was found not to meet the reciprocity criterion. Moreover, that finding was reversed in a State court within a year of the lower court's decision. Table 6 provides a partial

listing of Federal land mining leases and permits granted to U.S. affiliate firms.

The reciprocity laws do not exclude foreigners from the exploration, purchase, or development of land that is not owned or administered by the Federal Government, regardless of whether the investment is through a U.S. subsidiary or directly by a foreign operation. All developers of minerals, regardless of the nationality of the stockholders, must meet all requirements established to meet health and safety codes, air quality standards and any other similar legislation, however. They are also subject to State, local, and Federal taxes.

While U.S. law generally does not distinguish between U.S. and foreign investors in this country, the Federal Government does monitor foreign investment. The Committee on Foreign Investment in the United States reviews investments in the United States and determines if they have major implications for the national interest, but the committee has no legislative authority to disapprove or block foreign investments in U.S. companies.

ISSUES

Opponents of foreign investment in U.S. mineral assets often maintain that foreign investors would be less sensitive to the social, economic, political, and national defense needs of this country and more prone to act in a manner that would not be in the best interests of this country or its citizens. Furthermore, with potentially important industrial assets under the control of foreign interests, those that argue against foreign investment suggest that the ability of the United States to influence the behavior of these firms would somehow be reduced. For example, those individuals claim that foreign investors would be more likely to break up, sell, or otherwise dispose of the assets of a U.S. company and reduce employment at the firm. Opponents also suggest that corporate practices may reflect the priorities of a foreign country and not recognize the national security interests of the United States. At the very least, they suggest, ownership in U.S. industry should be limited to those countries that allow an equivalent amount of ownership by U.S. investors.

On the other hand, proponents of foreign investment argue that foreign owners can provide essential capital, act as a catalyst for growth, introduce new technology and management skills, expand employment, and improve productivity. Furthermore, proponents argue, a special policy designed to more closely regulate foreign investment in the United States would be inconsistent with this country's traditional policy of encouraging the free flow of trade and investment. Perhaps most important, however, is the fact that in the absence of foreign investors or joint venture partners, many mines, smelters, and other mineral operations in this country might well be permanently closed. In other words, the growth of foreign investment in the minerals industry has helped save jobs, reduce the minerals trade deficit, and—from the national defense perspective—maintain overall mineral and metal self-sufficiency at reasonably high levels. In the absence of domestic buyers, proponents maintain, foreign investors have helped to maintain a viable domestic minerals industry.

Table 6.—Federal land mining leases and permits granted to U.S. affiliate firms

Lessee and State	Leases and permits	Commodity
ASARCO, Incorporated:		
Arizona	1 lease	Copper, molybdenum, silver.
Missouri	1 lease	Lead, zinc, copper.
Do.	14 permits	Lead, zinc.
ASARCO, U.S. Borax: Idaho ..	1 lease	Copper, gold.
Cominco American:		
Missouri	11 permits	Lead, zinc.
Do.	16 leases	Phosphate.
Montana	1 lease	Do.
Cominco American, Dresser Industries:		
Missouri	6 leases	Lead, zinc, copper.
Do.	2 permits	Nickel, cobalt.
Footo Mineral Co.:		
Nevada	11 leases	Sodium.
Do.	11 leases	Potash.
Do.	4 leases	Lithium.
Hanna Mining Co.: Minnesota	3 permits	Copper, nickel.
Inspiration: Wisconsin	1 permit	Copper, zinc, lead, gold.
International Nickel Co.:		
Minnesota	2 leases	Copper, nickel.
Do.	1 permit	Do.
Noranda Exploration:		
Missouri	4 permits	Lead, zinc.
New Mexico	9 leases	Potash.
Do.	6 permits	Do.
Noranda Lakeshore Mines Inc.:		
Arizona	1 lease	Copper.
Texasgulf Western: Missouri ..	16 permits	Lead, zinc.
Texasgulf Inc.:		
Utah	4 leases	Potash.
Wyoming	1 lease	Sodium.
Do.	4 leases	Do.

Proponents point out that there are adequate measures (e.g., export controls) that the Government can impose for foreign policy, scarcity, or national security reasons. Also, foreign investment in strategically significant domestic industries such as the nuclear or defense industries is specifically limited. Furthermore, restrictions on foreign investment in domestic mineral firms could precipitate retaliatory actions against large U.S. investments abroad.

Many of the strongest proponents for the continuation of the existing, largely unrestricted policy toward foreign

ownership and investment are from within the minerals community itself. As recent investment trends have suggested, restricting foreign ownership could limit the ability of stockholders and executives in the minerals industry to make the "best deal" possible for any assets that they may decide to sell. Within the minerals industry, one's position on the foreign investment policy issue largely depends on the answer to the question: "Would this be a friendly or a hostile takeover?"

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APPENDIX A.—PRINCIPAL SUPPORTING STATISTICAL TABLES

Table A-1.—Selected data on foreign investments¹ in all U.S. industries and the U.S. minerals industry

Industry segment	Affiliates	Total assets, 10 ⁶ \$	Sales, 10 ⁶ \$	Net income, 10 ⁶ \$	Employee compensation, 10 ⁶ \$	Employees	Land owned, 10 ³ acres	Mineral rights owned and leased, 10 ³ acres	PPE, 10 ⁶ \$ Gross book value	Expenditures for new	U.S. affiliates, 10 ⁶ \$ Exports shipped	Imports shipped
1984												
Metal mining:												
Iron ore	4	1,291	628	46	161	3,407	92	W	1,370	5	93	0
Copper, lead, zinc, gold and silver ores	15	2,097	885	-95	189	6,319	W	W	1,220	96	12	6
Other metallic ores ²	10	382	153	8	35	954	9	448	279	8	7	12
Metal mining services	1	133	28	-52	6	133	W	105	153	(³)	0	0
Total	30	3,903	1,694	-93	391	10,813	173	1,094	3,023	110	112	W
Nonmetallic minerals, except fuels	15	1,365	611	20	111	3,556	144	112	1,135	74	86	W
Primary metals:												
Ferrous metals	47	5,021	6,163	-38	1,376	35,270	26	40	5,104	138	67	451
Nonferrous metals	37	10,650	11,483	-190	2,018	61,375	447	W	7,018	414	850	1,887
Total	84	15,671	17,646	-228	3,394	96,645	474	W	12,123	552	917	2,338
Stone, clay, and glass products:												
Glass products	11	1,696	2,513	85	W	25,573	5	(⁴)	1,309	89	W	38
Stone, clay, concrete and others	66	6,317	5,463	-14	W	42,050	159	W	4,743	298	W	189
Total	77	8,013	7,975	71	2,090	67,623	164	W	6,052	387	231	227
Total minerals industry ⁵	206	28,952	27,926	-230	5,986	178,637	955	4,408	22,333	1,123	1,346	2,634
All industries	9,630	596,396	596,048	9,400	72,902	2,715,318	13,258	63,266	268,214	24,995	56,344	100,427
1983												
Metal mining:												
Iron ore	4	1,342	557	-15	126	2,399	92	W	1,440	3	144	0
Copper, lead, zinc, gold and silver ores	13	1,389	666	-69	145	4,876	W	W	880	59	10	0
Other metallic ores ²	11	420	194	1	45	1,335	8	416	320	14	8	21
Metal mining services	2	141	25	-50	6	128	W	163	155	(³)	0	0
Total	30	3,293	1,442	-134	321	8,738	168	1,650	2,794	76	162	W
Nonmetallic minerals, except fuels	15	1,216	447	-4	89	3,105	144	93	1,081	45	61	W
Primary metals:												
Ferrous metals	45	3,017	2,985	-167	710	21,055	11	50	2,448	170	83	235
Nonferrous metals	35	10,884	10,524	34	1,929	62,521	465	W	7,133	339	1,077	1,509
Total	80	13,902	13,509	-132	2,639	83,576	475	W	9,581	509	1,160	1,744
Stone, clay, and glass products:												
Glass products	10	1,465	1,990	34	W	W	5	(⁴)	1,211	73	W	36
Stone, clay, concrete and others	61	5,346	4,291	-219	W	W	143	W	3,736	217	W	102
Total	71	6,811	6,281	-185	1,734	58,299	147	W	4,948	290	175	139
Total minerals industry ⁵	196	25,222	21,679	-455	4,783	153,718	934	4,241	18,404	920	1,558	1,960
All industries	9,347	531,738	536,640	5,584	66,807	2,546,514	14,198	69,714	244,012	23,179	53,854	81,464
1982												
Metal mining:												
Iron ore	4	1,432	537	-117	173	3,950	90	W	1,433	17	100	0
Copper, lead, zinc, gold and silver ores	11	W	W	-58	W	W	W	561	W	145	W	1
Other ores and mining services	12	W	W	-57	W	W	W	W	W	4	W	W
Total	27	4,675	873	-232	600	15,160	400	1,440	3,868	166	251	W
Nonmetallic minerals, except fuels	16	4,502	1,195	-69	235	7,275	W	W	3,958	342	181	84
Primary metals:												
Ferrous metals	44	3,164	2,874	-112	768	21,732	12	W	2,511	361	130	369
Nonferrous metals	37	6,364	7,532	-195	1,310	48,068	58	W	4,223	411	763	885
Total	81	9,508	10,406	-307	2,078	69,800	70	W	6,735	772	893	1,254
Stone, clay, and glass products:												
Glass products	10	W	W	25	W	W	5	0	W	W	W	32
Stone, clay, concrete and others	52	W	W	-302	W	W	126	33	W	W	W	75
Total	62	5,404	4,944	-277	1,419	46,621	130	33	4,467	202	194	107
Total minerals industry ⁵	186	24,089	18,418	-885	4,332	138,856	600	4,525	19,028	1,482	1,519	1,577
All industries	8,894	472,989	515,722	4,332	62,013	2,435,143	14,164	73,951	223,265	28,835	59,744	84,331

See explanatory notes at end of table.

Table A-1.—Selected data on foreign investments¹ in all U.S. industries and the U.S. minerals industry—Continued

Industry segment	Affiliates	Total assets, 10 ⁶ \$	Sales, 10 ⁶ \$	Net income, 10 ⁶ \$	Employee compensation, 10 ⁶ \$	Employees	Land owned, 10 ³ acres	Mineral rights owned and leased, 10 ³ acres	PPE, 10 ⁶ \$		U.S. affiliates, 10 ⁶ \$		
									Gross book value	Expenditures for new	Exports shipped	Imports shipped	
1981													
Metal mining:													
Iron ore	3	905	701	W	154	4,484	W	W	1,232	16	W	0	
Copper, lead, zinc, gold and silver ores	12	W	W	W	W	W	W	746	W	228	W	W	
Other ores and mining services	12	W	W	-12	W	W	4	W	W	8	W	2	
Total	27	3,950	1,963	398	606	19,180	132	1,384	3,384	252	196	W	
Nonmetallic minerals, except fuels	15	4,715	1,088	87	329	8,124	W	W	3,578	449	143	34	
Primary metals:													
Ferrous metals	43	2,972	3,271	49	799	25,616	11	W	2,149	364	112	371	
Nonferrous metals	41	6,232	7,982	162	1,316	50,516	59	W	3,893	549	823	1,149	
Total	84	9,205	11,252	211	2,115	76,132	71	W	6,042	913	935	1,519	
Stone, clay, and glass products:													
Glass products	9	W	W	13	W	W	1	0	W	W	W	18	
Stone, clay, concrete and others	51	W	W	-89	W	W	115	36	W	W	W	87	
Total	60	5,155	4,616	-76	1,093	42,389	116	36	3,798	319	112	104	
Total minerals industry ⁵	186	23,025	18,919	620	4,143	145,825	319	4,626	16,802	1,933	1,386	1,728	
All industries	8,253	406,985	510,218	11,234	54,798	2,416,565	13,259	67,193	187,956	26,716	64,066	82,259	
1980													
Metal mining:													
Iron ore	3	916	587	49	113	3,424	W	W	1,218	14	0	0	
Copper, lead, zinc, gold and silver ores	11	413	219	-25	W	3,273	W	W	338	63	W	0	
Other ores and mining services	12	137	88	-22	W	1,126	4	543	84	18	0	5	
Total	26	1,466	893	2	209	7,823	97	612	1,640	96	W	5	
Nonmetallic minerals, except fuels	13	2,143	872	W	165	6,501	W	242	1,282	219	W	W	
Primary metals:													
Ferrous metals	39	2,257	2,786	9	656	22,562	7	W	1,672	226	180	319	
Nonferrous metals	36	5,337	7,327	242	1,213	52,746	31	W	3,269	386	674	1,354	
Total	75	7,595	10,113	251	1,869	75,308	38	W	4,942	612	854	1,673	
Stone, clay, and glass products:													
Glass products	11	W	W	33	W	W	1	0	W	48	W	18	
Stone, clay, concrete and others	47	W	W	15	W	W	113	13	W	281	W	97	
Total	58	4,436	4,186	48	1,062	46,524	115	13	3,135	329	61	115	
Total minerals industry ⁵	172	15,640	16,064	691	3,305	136,156	748	867	10,999	1,256	1,118	1,816	
All industries	7,310	292,033	412,705	8,917	40,047	2,033,932	9,552	47,785	127,838	16,891	52,199	75,803	
1979													
Metal mining:													
Iron ore	4	1,042	529	-3	98	3,565	60	W	1,226	28	189	0	
Copper, lead, zinc, gold and silver ores	6	346	176	15	W	W	22	129	307	34	0	0	
Other ores and mining services	7	59	16	-16	W	W	0	W	30	1	0	0	
Total	17	1,448	722	-4	171	7,161	82	869	1,563	63	189	0	
Nonmetallic minerals, except fuels ⁶	26	2,577	1,191	133	267	10,565	354	1,142	1,772	176	367	W	
Primary metals:													
Ferrous metals	34	1,449	1,814	51	411	17,518	5	0	1,057	97	91	119	
Nonferrous metals	27	4,371	6,029	269	1,015	49,533	24	W	2,932	401	410	1,178	
Total	61	5,819	7,843	319	1,427	67,051	29	W	3,989	498	501	1,297	
Stone, clay, and glass products:													
Glass products	10	W	841	16	203	11,230	1	0	W	W	W	18	
Stone, clay, concrete and others	46	W	2,508	81	689	35,794	105	20	W	W	W	100	
Total	56	4,017	3,349	98	893	47,024	106	20	3,017	237	67	118	
Total minerals industry ⁵	160	13,862	13,105	546	2,758	131,801	571	2,031	10,340	973	1,124	1,415	
All industries	5,433	228,556	327,870	7,301	31,686	1,753,188	7,316	39,943	101,209	11,150	44,341	63,039	

See explanatory notes at end of table.

Table A-1.—Selected data on foreign investments¹ in all U.S. industries and the U.S. minerals industry—Continued

Industry segment	Affiliates	Total assets, 10 ⁶ \$	Sales, 10 ⁶ \$	Net income, 10 ⁶ \$	Employee compensation, 10 ⁶ \$	Employees	Land owned, 10 ³ acres	Mineral rights owned and leased, 10 ³ acres	PPE, 10 ⁶ \$		U.S. affiliates, 10 ⁶ \$		
									Gross book value	Expenditures for new	Exports shipped	Imports shipped	
1978													
Metal mining:													
Iron ore	4	995	436	-27	82	3,367	66	W	1,177	W	159	0	
Copper, lead, zinc, gold and silver ores	5	211	W	-14	W	W	20	W	264	17	0	0	
Other ores and mining services	7	56	W	2	W	W	W	857	28	1	0	0	
Total	16	1,262	581	-39	131	5,911	86	972	1,469	96	159	0	
Nonmetallic minerals, except fuels ⁶	23	2,395	882	7	237	10,380	W	1,212	1,624	143	226	W	
Primary metals:													
Ferrous metals	25	1,118	1,407	36	295	12,947	3	0	794	59	57	206	
Nonferrous metals	24	3,603	4,769	121	822	41,113	22	W	2,381	247	249	770	
Total	49	4,721	6,175	157	117	54,060	25	W	3,175	307	306	976	
Stone, clay, and glass products:													
Glass products	8	W	W	17	W	W	1	0	W	W	W	12	
Stone, clay, concrete and others	42	W	W	129	W	W	90	14	W	W	W	83	
Total	50	2,836	3,360	146	798	45,780	91	14	2,217	306	67	95	
Total minerals industry ⁵	138	11,214	10,998	271	2,283	116,131	202	2,198	8,485	852	758	1,071	
All industries	4,824	181,187	241,543	4,843	24,225	1,429,871	6,733	39,350	80,633	9,318	32,169	56,567	
1977													
Metal mining:													
Iron ore	6	1,269	305	-36	72	3,954	92	W	W	164	82	0	
Copper, lead, zinc, gold and silver ores	5	187	W	W	W	W	W	W	W	W	0	0	
Other ores and mining services	7	40	W	W	W	W	0	963	W	W	0	0	
Total	18	1,496	430	-53	109	6,229	110	1,083	1,764	171	82	0	
Nonmetallic minerals, except fuels	20	1,956	671	45	200	9,282	352	917	1,338	92	163	W	
Primary metals:													
Ferrous metals	24	996	1,019	-14	225	11,858	2	0	727	53	41	140	
Nonferrous metals	26	3,675	4,526	144	928	51,026	15	W	2,313	233	272	592	
Total	50	4,670	5,545	130	1,153	62,884	18	W	3,040	286	313	732	
Stone, clay, and glass products:													
Glass products	7	W	W	W	W	W	1	0	W	W	W	10	
Stone, clay, concrete and others	30	W	W	W	W	W	41	2	W	W	W	54	
Total	37	1,736	2,022	94	472	32,265	42	2	1,378	171	35	64	
Total minerals industry ⁵	125	9,858	8,668	216	1,933	110,660	522	2,001	7,521	720	593	796	
All industries	4,046	143,488	193,991	3,966	18,781	1,218,711	6,753	33,281	66,785	7,558	24,858	43,896	

W Suppressed to avoid disclosure of proprietary data. PPE Gross book value of property, plant, and equipment, end of year.

¹Defined as ownership or control, directly or indirectly, by 1 foreign person (including any individual, branch, partnership, associated group, association, estate, trust, corporation, or other organization, and any foreign government) of 10 pct or more of the voting securities in an incorporated U.S. business enterprise or an equivalent interest in an unincorporated U.S. business enterprise.

²Beginning in 1983, data for affiliates in "Other metallic ores" are shown separately. Prior to 1983, data for these affiliates were shown in a single industry, "Other ores and mining services."

³Less than \$500,000.

⁴Less than 500 acres.

⁵Data may not add to totals shown owing to independent rounding and because undisclosed proprietary data are added to totals.

⁶Prior to 1980, data for coal mining affiliates are included with nonmetallic minerals.

Sources: U.S. Department of Commerce, Bureau of Economic Analysis (BEA). Detailed BEA estimates appear in the following Commerce publications: Foreign Direct Investment in the United States: Operations of U.S. Affiliates, 1977-80; Foreign Direct Investment in the United States: Annual Survey Results, Revised 1981 Estimates; Foreign Direct Investment in the United States: Operations of U.S. Affiliates, Revised 1982 Estimates; Foreign Direct Investment in the United States: Operations of U.S. Affiliates, Revised 1983 Estimates; and Foreign Direct Investment in the United States: Operations of U.S. Affiliates, Preliminary 1984 Estimation. In addition, estimates for selected items for the 1981-84 period, and a brief discussion of major changes in foreign direct investment appear in the Dec. 1984, Nov. 1985, and Oct. 1986 issues of the Survey of Current Business. Some of the detail for the minerals industries in this table is based on unpublished BEA estimates.

Table A-2.—Foreign investment in the U.S. minerals industry, by ultimate beneficial owner (UBO), 1985

UBO and affiliate(s) or assets	Ownership, pct	Country	Industry or commodity
AB Tresor	NAP	Sweden	Steel.
Uddeholm Aktiebolag	40	..do.	Steel mill products.
Ellwood Uddeholm Steel Co.	20	United States	Steel.
Uddeholm Corp. USA	100	..do.	Do.
Alcan Aluminium Ltd.	NAP	Canada	Aluminum.
Alcan Aluminum Corp.	100	United States	Aluminum, thorium.
Halco Mining Corp.	27	..do.	Iron ore.
Logan Aluminum Co.	40	..do.	Aluminum sheet.
Anglo American Corp. of South Africa Ltd.	NAP	Rep. of South Africa	Gold, copper, diamonds, energy; holding and management company for mining finance, investment metals, and agricultural products.
Minerals and Resources (Minorco)	100	Bermuda	Minerals.
Inspiration Resources	60	United States	Metals, petroleum, chemicals, coal.
Inspiration Consolidated Copper	100	..do.	Copper, silver, lead, zinc, gold.
Terra Chemicals International Inc.	100	..do.	Nitrogen.
Englehard Corp.	29	..do.	Precious metals.
Englehard Mineral and Chemical Corp.	100	..do.	Catalysts, precious metals, ferroalloys.
Specialty Metals Div.	100	..do.	Metals.
Freeport Kaolin	100	..do.	Clays, kaolin, ceramics.
Consolidated Gold Fields PLC	29	United Kingdom	Steel, mining, gold.
Gold Fields American	100	United States	Gold.
Newmont Mining	26	..do.	Mining and nonferrous metals.
Magma Copper Co.	100	..do.	Copper, gold.
Idarado Mining Co.	80	..do.	NA.
Resurrection Mining Co.	50	..do.	Zinc, silver.
Newmont Mines Ltd.	100	..do.	NA.
Carlin Gold Mining	100	..do.	Gold, mercury.
Dawn Mining Co.	51	..do.	Uranium.
Pinto Valley Copper Co.	100	..do.	Copper.
Foote Mineral Co.	89	..do.	Industrial minerals, calcium alloy, lithium, silicon, vanadium, ferroalloys.
South African Manganese Amcor Ltd. ¹	29	..do.	Ferroalloys.
Associated Minerals Consolidated Ltd.	100	Australia	NA.
Associated Minerals	100	United States	Titanium, thorium, zirconium, rutile.
Asahi Glass Co.	NAP	Japan	Glass products, alkali, chemicals, ceramics.
Woodward Iodine Corp.	100	United States	Iodine.
Asamera Inc.	NAP	Canada	Oil and gas, minerals, machinery.
Cannon Mine	100	United States	Gold.
Barranca Corporation Ltd.	NAP	Canada	Holding company.
Joint venture with Little Square Gold Mining Co.	NA	United States	Gold.
Barrick Resources Corp.	NAP	Canada	NA.
Barrick Mercur Gold Inc.	100	United States	Gold.
Blue Circles Industries PLC	NAP	United Kingdom	Cement and allied products.
Blue Circles Inc.	100	United States	Cement.
Brascan Ltd.	NAP	Canada	Aluminum, copper, precious metals, natural resources, and consumer products.
Brascade Resources	70	..do.	NA.
Noranda Mines Ltd.	41	..do.	Nonferrous metals, fertilizers, oil and gas, aluminum, forest products.
Noranda Mines Inc.	100	United States	Gold, lead, silver.
Joint venture, Pine Level project	NA	..do.	Phosphate.
Joint venture, Greens Creek	34	..do.	Silver, lead, copper, gold.
Noranda Aluminum	100	..do.	Aluminum.
Noranda U.S.A., Inc.	100	..do.	Aluminum sheet.
Norandex, Inc.	100	..do.	Aluminum extrusions.
Noranda Lakeshore Mines Inc.	100	..do.	Copper.
Canada Wire and Cable Ltd.	100	Canada	Copper wire.
Carol Cable and Wire	100	United States	Do.
Placer Development Ltd.	31	Canada	Gold, silver, copper, molybdenum.
Placer U.S. Inc.	100	United States	Gold.
Golden Sunlight Mines Inc.	100	..do.	Do.
McDermitt Mine	51	..do.	Mercury.
Cortez Gold mines	40	..do.	Gold.
Bald Mountain property	100	..do.	Do.
Noranda Grey Eagle Mines Inc.	62	..do.	Do.
Northland Gold Dredging	62	..do.	Do.
Hopewell Land Corp.	100	..do.	Phosphate.
Lacana Mining Inc.	28	Canada	Minerals, oil and gas exploration.
Joint venture, Pinson Mining	26	United States	Gold, mercury.
Gilt Edge property	60	..do.	Gold.
Joint venture, Santa Fe prospect	NA	..do.	Do.
British Steel Corp.	NAP	United Kingdom	Steel.
Joint venture with Tuscaloosa Steel Co.	MI	United States	Strip mill.
Slater Steel Corp.	50	..do.	Stainless steel.
Broken Hill Proprietary Co. Ltd.	NAP	Australia	Energy.
Utah International	100	United States	Energy, lead, zinc, coal, iron and steel, gold exploration.
Utah Marona Corp.	100	..do.	NA.

See explanatory notes at end of table.

Table A-2.—Foreign investment in the U.S. minerals industry, by ultimate beneficial owner (UBO), 1985—Continued

UBO and affiliate(s) or assets	Ownership, pct	Country	Industry or commodity
Canadian Pacific Ltd.	NAp	Canada	Oil and gas, minerals, forestry, railroads.
Canadian Pacific Enterprise Ltd.	70	..do.	NA.
Cominco Ltd.	54	..do.	Lead, zinc, plant nutrients, silver, gold.
Cominco American	100	United States	Nonferrous minerals, industrial minerals.
Joint venture, Magmont Mine	50	..do.	Lead, silver, zinc.
Joint venture, Buckhorn property	100	..do.	Gold, silver.
Joint venture, Red Dog deposit	100	..do.	Zinc, lead, silver.
Hawaii Western Steel	51	..do.	Steel.
Cementa AB	NAp	Sweden	Cement.
Continental Cement Co.	100	United States	Do.
Cementia Holdings AG	NAp	Switzerland	Do.
Davenport Cement Co.	100	United States	Do.
Centennial Minerals Ltd.	NAp	Canada	NA.
Joint venture, Aurora property	NA	United States	Gold.
Ceramiche CISA S.p.A.	NAp	Italy	NA.
CISA America Corp.	100	United States	Kaolin.
Cia. Vale do Rio Doce	NAp	Brazil	Iron ore.
Joint venture, California Steel	25	United States	Steel mill products.
Co-Steel International Ltd.	NAp	Canada	Steel.
Chaparral Steel Co.	50	United States	Do.
Raritan Steel Co.	100	..do.	Do.
Credit Lyonnais	NAp	France	NA.
Macalloy Corp.	48	United States	Ferroalloys.
Domtar Industries	NAp	Canada	Zinc.
Gypsum mines	100	United States	Gypsum.
Salt mines	100	..do.	Salt.
Echo Bay Mines Ltd.	NAp	Canada	Nonferrous metals.
Round Mountain Gold Corp.	50	United States	Gold, silver.
Sunnyside Gold Co.	100	..do.	Gold.
Electra Northwestern Resources Ltd.	NAp	Canada	NA.
Joint venture, Aurora property	NA	United States	Gold.
Elkem Spigerverkat A/S	NAp	Norway	Steel, ferroalloys.
Elkem Metals	100	United States	Calcium, chromium, ferroalloys, zirconium, silicon alloys.
ENI Group	NAp	Italy	NA.
Anic	100	..do.	NA.
Partnership with Agrico Chemicals Co.	21	United States	Phosphate rock.
Fermenta AB	NAp	Sweden	NA.
New Mexico Potash	100	United States	Potash.
Galactic Resources Ltd.	NAp	Canada	NA.
Summitville Consolidated Mines Ltd.	100	United States	Gold.
Genstar Ltd.	NAp	Canada	Cement.
Genstar Cement Co.	100	United States	Do.
Getraco-Fimetal	NAp	France	NA.
Bayou Steel Co.	70	United States	Steel.
Glamis Gold Ltd.	NAp	Canada	NA.
Chemgold Inc.	100	United States	Gold.
Government of France	NAp	France	NAp.
Entreprise de Recherches et d'Activités Pétrolières (ERAP)	100	..do.	NA.
Société Nationale Elf Aquitaine	67	..do.	NA.
Elf Aquitaine-Texasgulf Chemicals	100	United States	Energy, chemicals, phosphate rock, sulfur, potash, salt, oil exploration, and chemicals.
Bureau de Recherches Géologiques et Minières (BRGM)	100	France	NAp, government agency.
Joint venture with AMAX	NA	United States	Nickel, cobalt.
Compagnie Française d'Entreprises Minières Métallurgiques et d'Investissements (COFREMMI)	NA	France	NA.
Government of Kuwait	NAp	Kuwait	NAp.
Willy Korf	70	Fed. Rep. of Germany	Steel, steel technologies.
KORF Industries	100	United States	Steel technology.
Georgetown Steel Corp.	100	..do.	Steel.
Government of the United Kingdom	NAp	United Kingdom	NAp.
British Petroleum Co. PLC (U.K.)	25	..do.	Energy and natural resources, especially oil.
Standard Oil Co. of Ohio (Sohio)	55	United States	Oil and gas.
Kennecott	100	..do.	Nonferrous metals.
Chino Mines Co.	67	..do.	Copper, gold.
Amselco Minerals Corp.	50	..do.	Gold.
Ozark Lead Co.	100	..do.	Lead.
Sohio Chemical Co.	100	..do.	Nitrogen.

See explanatory notes at end of table.

Table A-2.—Foreign investment in the U.S. minerals industry, by ultimate beneficial owner (UBO), 1985—Continued

UBO and affiliate(s) or assets	Ownership, pct	Country	Industry or commodity
Hampton Gold Mining Areas PLC	NAP	United Kingdom	Investment company with holdings in mining.
Joint venture, Creig, CO mine	NA	United States	Gold, rare earths.
Heidelberg Zement AG	NAP	Fed. Rep. of Germany	Cement.
Lehigh Portland Cement Co.	100	United States	Do.
Holderbank Financiere Glaris S.A.	NAP	Switzerland	NA.
Dundee Cement Co.	100	United States	Cement.
IFI International S.p.A.	NAP	Italy	NA.
River Cement	100	United States	Cement.
Hercules Cement	100	..do.	Do.
Imetal SA	NAP	France	Holding company, nonferrous metals.
Copperweld	66	United States	Steel, copper fabrication.
Inco Ltd.	NAP	Canada	Nickel and copper, and their byproducts.
International Nickel Inc.	100	United States	NA.
Inco Alloys International Inc.	100	..do.	Nickel alloy.
Inco United States	100	..do.	NA.
International Metal Reclamation Co.	100	..do.	NA.
American Copper & Nickel Co.	100	..do.	Gold exploration.
Ivaco Inc.	NAP	Canada	Steel and paper.
Atlantic Steel Co.	100	United States	Steel.
Laclede Steel Co.	51	..do.	Do.
Capital Wire and Fence Co.	100	..do.	Steel mill products.
Florida Wire and Cable	88	..do.	Do.
National Wire Products Corp.	60	..do.	Do.
New York Wire Mills	100	..do.	Do.
Johnson Matthey Public Limited Co.	NAP	United Kingdom	Precious and other metals, pigments.
Johnson Matthey Inc.	100	United States	Precious metals.
Johnson Matthey Refining Inc.	100	..do.	Do.
Kawasaki Steel Corp.	NAP	Japan	Steel.
California Steel	25	United States	Steel mill products.
Kemira Oy	NAP	Norway	Fertilizers and chemicals.
Savannah, GA, titanium dioxide plant	100	United States	Titanium dioxide.
LaFarge Corp.	NAP	France	Cement, concrete, aluminous cements, plaster.
General Portland	100	United States	Cement.
Madre Mining Ltd.	NAP	Canada	NA.
Deer Trail Mine	100	United States	Silver.
Mediterranean Investors Group S.A.	NAP	Saudi Arabia	Holding company.
Sunshine Mining Co.	28	United States	Antimony, silver, precious metals.
Idaho Garnet Abrasives	100	..do.	Garnet.
Sixteen-to-One Mine	67	..do.	Silver, gold.
Lincoln Mining Co.	100	..do.	Gold.
Gilt Edge	40	..do.	Do.
MIM Holdings Ltd.	NAP	Australia	Nonferrous metals.
ASARCO Incorporated ³	32	United States	Arsenic, bismuth, calcium alloy, copper, selenium, silver, dolomite, zinc.
Joint venture, Eisenhower Mining Co.	50	..do.	Copper.
Joint venture, Resurrection Mining	50	..do.	Zinc, lead, silver.
Mitsubishi Metal Corp.	NAP	Japan	Nonferrous metals.
Chino Mines Co.	33	United States	Copper.
Mitsui & Co. Ltd.	NAP	Japan	Iron and steel, machinery, foodstuffs, chemicals (including fertilizer), nonferrous metals, textiles, energy, lumber and forestry, rubber, construction.
Alumax	45	United States	Aluminum.
Eastalco Aluminum	100	..do.	Do.
Intalco Aluminum Co.	100	..do.	Do.
Mitsui & Co. USA	100	..do.	Holding company.
Inorgchem Development Inc.	100	..do.	NA.
North American Brine Resources	10	..do.	Iodine.
International Titanium Co.	18	..do.	Titanium.
Montoro Gold	NAP	Canada	NA.
Gold deposit	100	United States	Gold.
MPC Holdings Ltd.	NAP	Switzerland	NA.
Missouri Portland Cement Co.	100	United States	Cement.
Musto Exploration Ltd.	NAP	Canada	NA.
Apex Mine	100	United States	Germanium, gallium, silver, zinc.
Nippon Kokan K.K.	NAP	Japan	Steel.
National Steel Corp.	50	United States	Do.
National Southwire Co.	100	..do.	Aluminum.
International Light Metals Corp.	40	..do.	Titanium, lightweight alloy technologies.

See explanatory notes at end of table.

Table A-2.—Foreign investment in the U.S. minerals industry, by ultimate beneficial owner (UBO), 1985—Continued

UBO and affiliate(s) or assets	Ownership, pct	Country	Industry or commodity
Nisshin Steel Co. Ltd.	NAp	Japan	Iron and steel.
Wheeling-Pittsburgh Steel Corp. ⁴	10	United States	Steel.
Norcen Energy Resources Ltd. of Toronto	NAp	Canada	Exploration and development with interests mainly in oil, gas, and coal.
M.A. Hanna Co.	20	United States	Iron ore, nickel, silicon, ferrosilicon, and ferronickel.
Northern Dynasty Exploration Ltd.	NAp	Canada	Gold.
Northern Dynasty Exploration Ltd.	100	United States	Do.
Otto Wolff Handelsgesellschaft	NAp	Fed. Rep. of Germany	NA.
Hurricane Industries Inc.	100	United States	Steel.
Outokumpu Oy	NAp	Finland	Stainless steel, copper, zinc, nickel, ferrochrome, precious metals.
The Nippert Co.	100	United States	Copper rod and wire mill.
Pegasus Gold Ltd.	NAp	Canada	Gold, silver.
Landusky project	100	United States	Do.
Montana property	100	..do.	Do.
Zortmon project	100	..do.	Do.
Placer Development Ltd.	NAp	Canada	Gold.
Cortez Gold Mines	100	United States	Do.
Pressa S.p.A. Cementaria Robilante	NAp	Italy	Cement.
Alamo Cement Co.	100	United States	Do.
Rajso Torv AB	NAp	Sweden	NA.
Minnesota State lease	100	United States	Peat.
Rayrock Yellowknife Resources Inc.	NAp	Canada	NA.
Western Agriculture Minerals Co.	25	United States	Potash.
Pinson Mining Co.	27	..do.	Gold.
Preble Mining Co.	27	..do.	Do.
Dee Gold Mining Co.	29	..do.	Do.
Rhone Poulenc S.A.	NAp	France	NA.
Rhone Poulenc Inc.	100	United States	Rare earths, thorium hydroxide.
Rio Tinto Zinc Corp. Ltd.	NAp	United Kingdom	Energy and minerals.
Borax Holdings Ltd.	100	..do.	Boron.
U.S. Borax & Chemical Corp.	100	United States	Boron, molybdenum, silver.
CRA Ltd.	57	Australia	Investment company.
Comalco	67	..do.	Aluminum.
Commonwealth Aluminum Corp.	100	United States	Do.
Royal Dutch/Shell Group	NAp	Netherlands/United Kingdom	Oil and gas, chemicals, metals, and coal.
Billiton Exploration	100	United States	Metals.
Billiton Metals	100	..do.	Do.
General Atomic Co.	100	..do.	Thorium, nuclear fuels.
Seagrams Co.	NAp	Canada	NA.
E.I. duPont de Nemours & Co. Inc.	23	United States	Chemicals, materials.
SKW Trostberg Aktiengesellschaft	NAp	Fed. Rep. of Germany	NA.
SKW Alloys Inc.	100	United States	Ferroalloys.
Societe des Ciments Français	NAp	France	NA.
Coplay Cement Co.	100	United States	Cement.
Societe des Ciments Vicats	NAp	France	Cement, construction materials.
National Cement Co.	100	United States	Cement.
Societe Generale de Belgique	NAp	Belgium	Nonferrous metals, cable, engineering.
Union Minière SA (Belgium)	100	..do.	Metals, nonmetals.
Joint venture, Union Mines Inc. (USA)	100	United States	Metals, investments in mining.
Union Zinc	100	..do.	Zinc.
Jersey Minière Zinc Co.	100	..do.	Zinc, germanium.
Joint venture, Pine Level project	NA	..do.	Phosphate.
SADACEM and SEDEMA SA	100	Belgium	Vanadium and molybdenum.
Union Copper Inc.	100	United States	NA.
Platoro	100	..do.	NA.
Carolmet	100	..do.	Cobalt.
Chemicals, Inc.	100	..do.	Ferroalloys.
Sonora Gold Co.	NAp	Canada	NA.
Jamestown Mine	100	United States	Gold.
St. Lawrence Cement Inc.	NAp	Canada	NA.
Independent Cement Co.	100	United States	Cement.
Sumitomo Metal Corp.	NAp	Japan	Steel and engineering.
Joint venture with LTV Corp.	NA	United States	Galvanized zinc.
Partnership with Allegheny Ludlum Steel Corp.— ALS Metals Co.	NA	..do.	Titanium.
Morenci copper mine	15	..do.	Copper, gold.
Tyrone copper mine	15	..do.	Do.

See explanatory notes at end of table.

Table A-2.—Foreign investment in the U.S. minerals industry, by ultimate beneficial owner (UBO), 1985—Continued

UBO and affiliate(s) or assets	Ownership, pct	Country	Industry or commodity
Swiss Aluminum Ltd. (Alusuisse)	NA ¹	Switzerland	Aluminum, chemicals, engineering, energy, mining.
Consolidated Aluminum Corp.	92	United States	Aluminum, magnesium-thorium alloys.
Ormet Corp.	66	do.	Alumina, aluminum.
Terramar Resources Corp.	NA ¹	Canada	NA.
TRL Resources Inc.	100	do.	NA.
Rainbow claims	100	United States	Gold.
Reid Mine	100	do.	Gold, silver.
United Resources Industries Inc.	NA ¹	Japan	NA.
Godco USA Inc.	100	do.	NA.
North American Brine Industries	50	United States	Iodine.
Veronex Resources Ltd. of Canada	NA ¹	Canada	NA.
Joint venture, Junction Reef prospect	NA	United States	Gold.
Voest-Alpine AG	NA ¹	Austria	NA.
Bayou Steel Corp.	30	United States	Steel.
Von Roll AG	NA ¹	Switzerland	NA.
New Jersey Steel Corp.	100	United States	Steel.
Westerly Mines Ltd.	NA ¹	Canada	NA.
Joint venture, Santa Fe prospect	NA	United States	Gold.
Wharf Resources Ltd.	NA ¹	Canada	NA.
Tiagra Gold Inc.	100	United States	Gold.

MI Minority interest. NA Not available. NA¹ Not applicable.

¹Also 38.5 pct held by African Metals Ltd.

²British Petroleum is also 17 pct owned by the Bank of England.

³ASARCO in turn owns 44 pct of MIM Holdings.

⁴Wheeling-Pittsburgh has since filed for bankruptcy.

Sources: U.S. Bureau of Mines Minerals Yearbook (various years); U.S. Bureau of Mines Minerals and Materials Monthly (various issues); Moody's International Industrial Index; Forbes Directory of 100 Largest Foreign Investors in the United States (various years); Engineering and Mining Journal International Directory of Mining Corporations; various corporate annual reports.

Table A-3.—Foreign investment in U.S. steel capacity, 1985

Country and ultimate beneficial owner	U.S. steel company	Proportional foreign control, pct	Capacity, 10 ³ st	
			Total	Equivalent foreign-owned
Austria: Voest-Alpine AG	Bayou Steel Corp.	30	650	195
Canada:				
Canadian Pacific Ltd.	Hawaii Western Steel	151	60	31
Co-Steel International	Chaparral Steel Co.	50	1,200	600
Do	Raritan Steel Co.	100	880	880
Ivaco Inc.	Atlantic Steel Co.	100	740	740
Do	Laclede Steel Co.	51	800	408
Federal Republic of Germany:				
Otto Wolff Handelgesellschaft	Hurricane Industries Inc.	100	100	100
KORF Industries ²	Georgetown Steel Corp.	100	660	660
France: Getraco-Fimetel	Bayou Steel Corp.	70	650	455
Japan:				
Nippon Kokan K.K.	National Steel Corp.	50	4,900	2,450
Nisshin Steel Co. Ltd.	Wheeling-Pittsburgh Steel Corp.	10	3,000	300
Sweden: Uddeholm Aktiebolag	Ellwood Uddeholm Steel Co.	20	100	20
Switzerland: Von Roll AG	New Jersey Steel Corp.	100	240	240
United Kingdom: British Steel Corp.	Slater Steel Corp.	50	60	30
Total	NA ¹	NA ¹	13,390	37,109

NA¹ Not applicable.

¹Reflects the ownership interests of Cominco Ltd., a Canadian affiliate of Canadian Pacific Ltd.

²70 pct owned by the Government of Kuwait.

³Equivalent to 5 pct of U.S. raw steel capacity.

Table A-4.—Foreign investment in U.S. tonnage ferroalloys¹ capacity,² 1985

Country and ultimate beneficial owner	U.S. operator	Smelter	Proportional foreign control, pct
Belgium: SEDEMA SA	Chemetals Inc	Kingwood, WV	100
Canada:			
Norcen Energy Resources Ltd.	M. A. Hanna Co.	Riddle, OR	28
Do	do	Wenatchee, WA	28
Federal Republic of Germany:			
SKW Trostberg Aktiengesellschaft	SKW Alloys Inc.	Niagara Falls, NY	100
Do	do	Calvert City, KY	100
France: Credit Lyonnais	Macalloy Corp.	Charleston, SC	48
Norway:			
Elkem Spigerverkat A/S	Elkem Metals	Alloy, WV	100
Do	do	Ashland, OH	100
Do	do	Marietta, OH	100
United Kingdom:			
Consolidated Gold Fields PLC ³	Footo Minerals Co.	Keokuk, IA	21
Do	do	Graham, WV	21

¹Chromium, manganese, and silicon ferroalloys and metal.

²Data on the capacity of individual ferroalloy smelters are not available for publication. For the industry in the aggregate, foreign-owned capacity (prorated based on the percentage of voting securities held by the foreign owner) amounted to 726 MW of active furnace capacity at the end of 1985. This was equivalent to 56 pct of total U.S. active tonnage ferroalloys (and their respective metals) capacity.

³29 pct owned by Anglo-American.

Table A-5.—Foreign investment in U.S. primary aluminum smelting capacity, 1985

Country and ultimate beneficial owner	U.S. operator	Smelter	Proportional foreign control, pct	Capacity, 10 ³ st	
				Total	Equivalent foreign-owned
Canada:					
Alcan Aluminium Ltd.	Alcan Aluminum Corp.	Seabee, KY	100	180	41,335
Brascan Ltd.	Noranda Aluminum	New Madrid, MO	100	225	225
Japan:					
Mitsui & Co. Ltd.	Alumax	Mt. Holly, SC	250	200	100
Do	do	Frederick, MD	250	176	88
Do	do	Ferdale, WA	250	280	140
Nippon Kokan K.K.	National Southwire Co.	Hawesville, KY	50	190	95
Switzerland:					
Swiss Aluminium Ltd.	Consolidated Aluminum Corp.	New Johnsonville, TN	100	144	144
Do	Ormet Corp.	Hannibal, OH	66	270	178
United Kingdom:					
Rio Tinto Zinc Corp. Ltd.	Commonwealth Aluminum Corp.	Goldendale, WA	3100	185	185
Total	Nap	Nap	Nap	1,850	41,335

Nap Not applicable.

¹Reflects ownership interests of Noranda Mines Ltd., a Canadian affiliate of Brascan Ltd.

²Alumax is 45 pct owned by Mitsui and 5 pct owned by Nippon Steel.

³Reflects ownership interests of CRA Ltd., an Australian affiliate of RTZ.

⁴Equivalent to 25 pct of U.S. primary aluminum smelting capacity.

Table A-6.—Foreign investment in U.S. copper mining capacity, 1985

Country and ultimate beneficial owner	U.S. operator	Mine	Proportional foreign control, pct	Capacity, ¹ 10 ³ mt	
				Total	Equivalent foreign-owned
Australia: MIM Holdings Ltd.	ASARCO Incorporated	Several	32	155	50
Canada: Brascan Ltd.	Noranda Lakeshore Mines Inc.	Lakeshore	2100	10	10
Japan:					
Mitsubishi Metal Corp.	Chino Mines Co.	Chino Mines	33	110	36
Sumitomo Metal Corp.	Phelps Dodge	Morenci	15	235	35
Republic of South Africa:					
Anglo-American Corp.	Inspiration Resources	Several	360	70	42
United Kingdom:					
Consolidated Gold Fields PLC ⁴	Newmont Mining	San Manuel	26	120	31
Do ⁵	Pinto Valley Copper Co.	Pinto Valley	26	85	22
Do ⁵	do	Miami	26	5	1
British Petroleum Co. PLC ⁵	Kennecott	Ray Mines	55	100	55
Do ⁵	do	Bingham Canyon	55	230	127
Do ⁵	Chino Mines Co.	Chino Mines	37	110	41
Total	Nap	Nap	Nap	1,230	6450

Nap Not applicable.

¹Recoverable copper.

²Reflects ownership interests of Noranda Mines Ltd., a Canadian affiliate of Brascan Ltd.

³Reflects ownership interests of Minorco, a Bermuda-based affiliate of Anglo-American.

⁴29 pct owned by Anglo-American.

⁵25 pct owned by the Government of the United Kingdom.

⁶Equivalent to 30 pct of U.S. copper mining capacity.

Table A-7.—Foreign investment in U.S. lead mining capacity, 1985

Country and ultimate beneficial owner	U.S. operator	Mine	Proportional foreign control, pct	Capacity, ¹ 10 ³ mt	
				Total	Equivalent foreign-owned
Australia:					
MIM Holdings Ltd.	ASARCO Incorporated	Leadville	32	7	2.24
Do	do	West Fork	32	46	14.72
Canada: Canadian Pacific Ltd.	Cominco American	Magmont	50	82	41.00
United Kingdom: British Petroleum Co. ²	Ozark Lead Co.	Milliken	55	82	45.10
Total	NAP	NAP	NAP	217	³ 103.06

NAP Not applicable.

¹Recoverable lead.²25 pct owned by the Government of the United Kingdom; Milliken Mine closed since 1983.³Equivalent to 18 pct of U.S. lead mining capacity.

Table A-8.—Foreign investment in U.S. zinc mining capacity, 1985

Country and ultimate beneficial owner	U.S. operator	Mine	Proportional foreign control, pct	Capacity, ¹ 10 ³ mt	
				Total	Equivalent foreign-owned
Australia:					
MIM Holdings Ltd.	ASARCO Incorporated	Leadville	16	15	2.4
Do	do	Severall	32	65	20.8
Belgium: Societe Generale de Belgique	Jersey Miniere Zinc Co.	Elmwood-Gordonsville	100	55	55.0
Canada: Canadian Pacific Ltd.	Cominco American	Magmont	² 50	20	10.0
Republic of South Africa: Anglo-American Corp.	Inspiration Resources	Beaver Creek	³ 60	15	9.0
United Kingdom: British Petroleum Co. ⁴	Ozark Lead Co.	Milliken	55	10	5.5
Total	NAP	NAP	NAP	180	⁵ 102.7

NAP Not applicable.

¹Metal content.²Reflects ownership interests of Cominco Ltd., a Canadian affiliate of Canadian Pacific Ltd.³Reflects ownership interests of Minorco, a Bermuda-based affiliate of Anglo-American.⁴25 pct owned by the Government of the United Kingdom; Milliken Mine closed since 1983.⁵Equivalent to 26 pct of U.S. zinc mining capacity.Table A-9.—Foreign investment in U.S. gold mining capacity,¹ 1985

Country and ultimate beneficial owner	U.S. operator	Mine	Proportional foreign control, pct	Capacity, 10 ³ tr oz	
				Total	Equivalent foreign-owned
Australia: MIM Holdings Ltd.	ASARCO Incorporated	Leadville	32	^e 20	6
Canada:					
Asamera Inc.	Asamera Minerals (U.S.) Inc.	Cannon	100	180	180
Barrick Resources Corp.	Barrick Mercur Gold Inc.	Mercur	100	100	100
Brascan Ltd.	Golden Sunlight Mines Inc.	Golden	100	^e 110	110
Do	Pinson Mining	Pinson	² 26	75	20
Do	Noranda Grey Eagle Mines Inc.	Grey Eagle	62	^e 50	31
Echo Bay Mines Ltd.	Round Mountain Gold Corp.	Round Mountain	50	160	80
Do	Sunnyside Gold Co.	Sunnyside	100	40	40
Galactic Resources Ltd.	Summitville Consolidated Mines Ltd.	Summitville	100	^e 130	130
Glamis Gold Ltd.	Chemgold Inc.	Picacho	100	30	30
Northern Dynasty Exploration Ltd.	Northern Dynasty Exploration Ltd.	Little Bald Mountain	42	^e 10	4
Pegasus Gold Ltd.	Pegasus Gold Ltd.	Landusky-Zortmon	100	100	100
Placer Development Ltd.	Cortez Gold Mines	Cortez	40	60	24
Do	do	Bald Mountain	84	^e 50	52
Rayrock Yellowknife Resources Inc.	Dee Gold Mining Co.	Dee	29	^e 55	16
Wharf Resources Ltd.	Tiaga Gold Inc.	Annie Creek	32	^e 20	6
Japan: Sumitomo Metal Corp.	Phelps Dodge	Morenci-Tyrone	15	^e 29	4
Republic of South Africa:					
Anglo-American Corp.	Carlin Gold Mining Operations	Carlin	³ 56	345	90
Do	Gold Fields Operations Co.	Ortiz	³ 100	⁴ 50	50
Do	do	Mesquite	³ 100	160	160
Do	Inspiration Consolidated Copper	Christmas	⁵ 60	1	1
Do	Magma Copper Co.	San Manuel	² 26	^e 30	8
Saudi Arabia:					
Mediterranean Investors Group S.A.	Sunshine Mining Co.	Sixteen-to-One	8	10	1
Do	do	Trixie	8	^e 25	1
United Kingdom:					
British Petroleum Co. PLC. ⁶	Kennecott	Chino	55	16	9
Do	Amselco Minerals Corp.	Alligator Ridge	50	110	55
Do	do	Gooseberry	85	16	14
Total	NAP	NAP	NAP	1,982	⁷ 1,314

^eEstimated. NAP Not applicable.¹Partial listing; numerous smaller mines with partial or full Canadian ownership are not included.²Reflects ownership interests of Lacana Mining Inc., a Canadian affiliate of Brascan Ltd.³Reflects ownership interests of Consolidated Gold Fields PLC, an affiliate of Anglo-American.⁴Due to close in 1986.⁵Reflects ownership interests of Minorco, a Bermuda-based affiliate of Anglo-American.⁶25 pct owned by the Government of the United Kingdom.⁷Equivalent to 44 pct of estimated U.S. gold mining capacity.

Table A-10.—Foreign investment in U.S. silver mining capacity, 1985

Country and ultimate beneficial owner	U.S. operator	Mine	Proportional foreign control, pct	Capacity, 10 ³ tr oz	
				Total	Equivalent foreign-owned
Australia: MIM Holdings Ltd.	ASARCO Incorporated	Several	32	9,745	3,118
Canada:					
Brascan Ltd.	Golden Sunlight Mines Inc.	Golden	100	13	13
Canadian Pacific Ltd.	Cominco American	Magmont	150	397	199
Echo Bay Mines Ltd.	Round Mountain Gold Corp.	Round Mountain	50	53	27
Pegasus Gold Ltd.	Pegasus Gold Corp.	Landusky-Zortmon	100	112	112
Republic of South Africa:					
Anglo-American Corp.	Black Pine Mining Co.	Black Pine	^a 50	1,019	510
Do	Carlin Gold Mining Operations	Carlin	² 26	20	5
Do	Gold Fields Operations Co.	Ortiz	² 100	6	6
Do	Inspiration Consolidated Copper	Christmas	³ 60	28	17
Do	Magma Copper Co.	San Manuel	² 26	509	132
Saudi Arabia:					
Mediterranean Investors Group SA	Sunshine Mining Co.	Sunshine	8	4,550	364
Do	do	Sixteen-to-One	8	1,472	118
United Kingdom:					
British Petroleum Co. ⁴	Kennecott	Bingham Canyon	55	996	548
Do	do	Chino	55	369	203
Do	Ozark Lead Co.	Milliken	55	285	157
Total	NAP	NAP	NAP	19,574	⁵ 5,529

^aEstimate. NAP Not applicable.¹Reflects ownership interests of Cominco Ltd., a Canadian affiliate of Canadian Pacific Ltd.²Reflects ownership interests of Consolidated Gold Fields PLC, an affiliate of Anglo-American.³Reflects ownership interests of Minorco, a Bermuda-based affiliate of Anglo-American.⁴25 pct owned by the Government of the United Kingdom; Milliken Mine closed since 1983.⁵Equivalent to 11 pct of U.S. silver mining capacity.

Table A-11.—Foreign investment in U.S. cement (clinker) capacity, 1985

Country and ultimate beneficial owner	U.S. operator	Proportional foreign control, pct	Capacity, 10 ³ st	
			Total	Equivalent foreign-owned
Canada:				
Genstar Ltd.	Genstar Cement Co.	100	1,134	1,134
St. Lawrence Cement Inc.	Independent Cement Co.	100	1,087	1,087
Federal Republic of Germany: Heidelberger Zement AG	Lehigh Portland Cement Co.	100	4,559	4,559
France:				
LaFarge Corp.	General Portland	100	6,135	6,135
Societe des Ciments Francais	Coplay Cement Co.	100	2,760	2,760
Societe des Ciments Vicats	National Cement Co.	100	738	738
Italy:				
IFI International S.p.A.	Hercules Cement	100	519	519
Do	River Cement	100	1,116	1,116
Pressa S.p.A. Cementaria Robilante	Alamo Cement Co.	100	787	787
Sweden: Cementa AB	Continental Cement	100	583	583
Switzerland:				
Cementia Holdings AG	Davenport Cement	100	780	780
Holderbank Financiere Glaris S.A.	Dundee Cement Co.	100	3,225	3,225
MPC Holdings Ltd.	Missouri Portland Cement Co.	100	497	497
United Kingdom: Blue Circles Industries PLC	Blue Circles Inc.	100	3,296	3,296
Total	NAP	NAP	27,246	127,246

NAP Not applicable.

¹Equivalent to 32 pct of U.S. cement (clinker) capacity.

Table A-12.—Foreign investment in the U.S. minerals industry—chronological listing of major acquisitions since 1980

Buyer and country	Acquisition	Purchase		Comments
		Price, 10 ⁶ \$	Year	
IFI International, S.p.A., Italy	River Cement and Hercules Cement.	NA	1980	Companies were part of Amcord Inc., which became a subsidiary of Gifford-Hill and Co. Inc. in 1979.
Swiss Aluminum Ltd. (Alusuisse), Switzerland.	Consolidated Aluminum Corp. (40 pct).	150	1980	Phelps Dodge sold its interest in Consolidated Aluminum in installments payable over 5 yr.
Mediterranean Investors Group S.A., Saudi Arabia.	Sunshine Mining Co.	NA	1980-81	Bought 22 pct; now owns 28 pct.
Canada Wire and Cable Ltd., Canada.	Carol Cable and Wire	140	1981	Canada Wire and Cable is subsidiary of Aloranda Mines, which is partly held by Brascan Ltd. of Canada.
Alan E. Clore, United Kingdom	Gulf Resources and Chemical Co.	37.1	1981	Increased stock holdings from 8.4 to 25.1 pct. Mr. Clore is a British financier who resides in Switzerland.
Consolidated Gold Fields PLC, United Kingdom.	Newmont Mining	309	1981	Consolidated Gold Fields purchased 22.4 pct of Newmont Mining in 1981. It owned 25 pct in 1984. Consolidated is partly owned by Anglo-American of The Republic of South Africa.
Elf Aquitaine, France	Texasgulf (now Elf Aquitaine)	2,500	1981	Elf Aquitaine is controlled by the French Government and is primarily a petroleum company. Price quoted covers 63.1 pct of the company's stock purchased from U.S. holdings. Elf Aquitaine purchased remaining 36.9 pct from the Canadian Development Corp., primarily a natural resources holding company controlled by the Canadian Government with mineral assets held by Texasgulf in Canada.
Elkem Spigerverkat A/S, Norway	Union Carbide ferroalloy plant	260	1981	Elkem is Norway's 3d largest industrial concern. The acquisition made Elkem the world's largest ferroalloy producer.
Ivaco Inc., Canada	Florida Wire and Cable	14.4	1981	Acquired 80 pct of Florida Wire and Cable.
Standard Oil Co. (Ohio), United States.	Kennecott Corporation	1,770	1981	British Petroleum retained a holding in Sohio prior to 1970.
Blue Circle Industries PLC, United Kingdom.	Kilgore Ceramics	12.5	1982	None.
LaFarge Corp., France	General Portland	326.5	1982	Purchased through Canadian subsidiary of LaFarge; since reorganized to directly report to LaFarge. General Portland is the largest U.S. cement producer.
Blue Circle Industries PLC, United Kingdom.	Martin Marietta cement plants (4)	NA	1982	Martin Marietta actively divesting cement properties.
Godoe USA Inc. and Inorgchem Development Inc., United States.	North American Brine Resources	NA	1983	Buyers are U.S. subsidiaries of Japanese companies. Godoe USA bought 50 pct of Co. North American, Inorgchem, a subsidiary of Mitsui & Co. bought 10 pct.
Newmont Mining, United States	Cities Service Co. copper operations, Miami, AZ.	75	1983	Known as Pinto Valley Copper Corp.
Sunshine Mines, United States	HMC Mining Inc.	NA	1983	Acquisition increased Sunshine's holding in the area from 1,387 to 12,751 acres. HMC had previously purchased Kennecott's Tintic Division with the backing of Sunshine. Sunshine was bought in part by the Mediterranean Investors Group in 1981.
Texasgulf Chemicals Co., United States.	Sodium lease tracts, Green River, WY.	NA	1983	Texasgulf Chemicals is subsidiary of Elf Aquitaine of France. Lease tracts bought from Philadelphia Quartz Corp.
Alcan Aluminium Ltd., Canada	ARCO Aluminum Co.	600-1,000	1984	ARCO divested Anaconda aluminum assets purchased in 1976.
Asahi Glass Co., Japan	Woodward Iodine Operations	NA	1984	Purchase joint venture of Amoco Production Company (49 pct) and PPG Industries Inc. (51 pct).
Broken Hill Proprietary Co. Ltd., Australia.	Utah International and Utah Marona Corp.	2,400	1984	General Electric had purchased Utah International (UI) in 1976. At the time, the divestiture was the largest of all such transactions. 70 pct of UI purchase price was for coal mining properties in Australia.
Local investors (50 pct), United States; Cia. Vale do Rio Doce, Brazil; and Kawasaki Steel Corp., Japan.	California Steel	110	1984	Formerly the Fontana, CA, facilities of Kaiser Steel Corp.
Nippon Kokan KK, Japan	National Steel Corp.	292	1984	Bought 50 pct of National Steel, a subsidiary of National Intergroup. National Steel was 7th ranked U.S. steelmaker in 1984.

NA Not available.

Table A-12.—Foreign investment in the U.S. minerals industry—chronological listing of major acquisitions since 1980—Continued

Buyer and country	Acquisition	Purchase		Comments
		Price, 10 ⁶ \$	Year	
Nisshin Steel Co. Ltd., Japan	Wheeling-Pittsburgh	NA	1984	In the 1st direct investment by any foreign company in a major U.S. steel company, Nisshin bought a 10 pct interest in Wheeling-Pittsburgh (W-P) through purchase of a new issue of common stock; W-P bought a smaller share in Nisshin.
Norcen Energy Resources Ltd., Canada.	M.A. Hanna Co.	NA	July 1982 May 1984	Increased share from 8.8 to 28 pct. Hanna accounts for about 10 pct of U.S. iron ore capacity and is the only domestic integrated nickel producer.
Societe Generale de Belgique, Belgium.	Jersey Miniere Zinc Co.	NA	1984	Bought Gulf + Western's 60 pct holding through U.S. subsidiary Union Zinc Co.
Blue Circle Industries PLC, United Kingdom.	Atlantic Cement Co.	145	1985	Sold by Newmont Mining, a foreign-held company.
Comalco Pty. Ltd., Australia	Martin Marietta aluminum assets . .	400	1985	Rio Tinto Zinc of the United Kingdom is a substantial shareholder of CRA Ltd. of Australia, which controls Comalco, that country's leading aluminum producer. Comalco's U.S. aluminum subsidiary was redesignated Commonwealth Aluminum Corp.
Echo Bay Mines Ltd., Canada	Copper Range	55	1985	Copper Range was sold by Louisiana Land and Exploration, which had acquired the copper company in 1977. Echo Bay was a subsidiary of IU International Corp. of the United States until IU spun off its controlling interest in Echo Bay to common shareholders.
Englehard Corp., United States . . .	Freeport Kaolin	100	1985	29 pct of Englehard is owned by Charter Consolidated of the U.K., which is controlled by Anglo-American of the Republic of South Africa.
Kemira Oy, Finland	Titanium dioxide plant owned by American Cyanamid in Savannah, GA.	100	1985	NL Industries, a U.S. concern, had attempted to acquire plant but had been opposed by the Federal Trade Commission.
British Steel Corp., United Kingdom.	Tuscaloosa steel plant	NA	1985	Acquisition of Tuscaloosa secures a market for British Steel slab exports. British Steel will supply the 250,000 short tons of slab the mill will use each year.
MIM Holdings, Ltd., Australia	ASARCO Incorporated	NA	1985	MIM increased its ASARCO holdings to 32.4 pct; ASARCO owns 44 pct of MIM.

NA Not available.

Table A-13.—Selected joint ventures in domestic mineral projects that include foreign partners

Venture and participants	Share, pct	Country	Date	Commodity and comments
ALS Metals Co.: Allegheny Ludlum Steel Corp.	NA	United States	1983	Titanium—Preforms for the products are to be obtained from Sumitomo and finished by ALS using Allegheny Ludlum steelmaking equipment.
Sumitomo Metal Corp.	NA	Japan		
Aurora property: Electre Northwestern Resources Ltd.	NA	Canada	NA	Gold.
Centennial Minerals Ltd.	NA	..do.		
Bingham North ore shoot extension (Kennecott) and Carr Fork Mine (Anaconda): Kennecott	96	United States	1985	Copper—Joint operating agreement for the 2 adjacent properties. Kennecott (subsidiary of British Petroleum Co.) would receive 96 pct of the ore output. Subject to approval by U.S. Justice Department.
Anaconda	4	..do.		
Buckhorn deposit: Cominco American Inc.	NA	..do.	1983	Gold, silver—Cominco American is U.S. subsidiary of Cominco Ltd. of Canada.
Pembina International Corp.	NA	..do.		
California Steel Corp.: Cia. Vale do Rio Doce (CVRD)	25	Brazil	1984	Steel—CVRD and Kawasaki are part owners of the Tubarao Steel plant in Brazil, which will supply most of California Steel's imported slab. Formerly the Fontana, CA, facilities of Kaiser Aluminum.
Kawasaki Steel Corp.	25	Japan		
Local investors	50	United States		
Cannon Mine: Asamera Minerals Inc.	51	Canada	NA	Gold.
Breakwater Resources Ltd.	49	United States		
Chino Mines: Mitsubishi Metal Corp.	33	Japan	NA	Copper.
Kennecott	67	United States		
Craig Co. prospect: Hampton Gold Mining Areas PLC ..	NA	United Kingdom	NA	Gold and rare earths, monazite.
Marathon Gold Corp.	NA	United States		
Centennial Gold Corp.	NA	Canada		
Elwood Uddeholm Steel Co.: Elwood City Forge	80	United States	1985	Steel—Uddeholm Tooling is subsidiary of AB Tresor of Sweden.
Uddeholm Tooling	20	Sweden		
Greens Creek: Noranda Mines	33.8	United States	NA	Silver, lead, copper, gold—Noranda Mines is held ultimately by Brascan Ltd. of Canada.
Anaconda	33.8	..do.		
Texas Gas & Exploration Co.	12.3	..do.		
Bristol Bay Resources	11.2	..do.		
Exalas Resources Corp.	8.9	..do.		
International Light Metals Corp.: Nippon Kokan K.K.	40	Japan	1985	Titanium, aluminum—Nippon is reportedly investing \$45 million; expected to supply traditional U.S. markets and develop new Asian and European markets. Subject to corporate and government review.
Martin Marietta	60	United States		
Iron ore prospect: KORF Engineering ¹	NA	Fed. Rep. of Germany	1985	Iron and steel—Involves use of State land.
U.S. Steel	NA	United States		
State of Minnesota	NA	..do.		
Leadville Mine: ASARCO Incorporated	50	United States	NA	Lead, zinc—Resurrection owned by Newmont, which is held in part by Anglo-American of the Republic of South Africa.
Resurrection Mining	50	See comments		
Magma Mt. Mine: Cominco American	NA	United States	NA	Lead—Cominco is ultimately owned by Canadian Pacific Ltd.
Dresser Industries	NA	..do.		
McDermitt Mine: Placer U.S. Inc.	51	..do.	NA	Mercury, gold—Placer U.S. is ultimately owned by Brascan Ltd. of Canada.
Sterling Mineral Venture	49	..do.		
North American Brine Resources: Beard Oil Co.	40	..do.	NA	Iodine—Inorgchem is U.S. subsidiary of Mitsui & Co., Japan; Godoe is U.S. subsidiary of Harough United Resources Industry Co., Japan.
Godoe USA Inc.	50	..do.		
Inorgchem Development Inc.	10	..do.		
Phosphate rock mine near Lee Creek: Agrico Chemicals Co.-Eni Group ² ..	21.6	United States and Italy	1981	Phosphate rock—The mine's planned capacity represents about 6 pct of U.S. marketable phosphate rock production (1981).
Agrico Chemicals Co.-Cie Francaise de L'Azote Cofaz. ²	19.0	United States and France		
Pine Level project: Noranda Mines	51	United States	1975	Phosphate rock—Noranda (Canada) and New Jersey Zinc (Belgium) held by foreign companies.
New Jersey Zinc	49	..do.		
Pinson Mining: Lacana Mining Corp.	NA	Canada	NA	Gold—Lacana is partly held by Brascan Ltd. of Canada.
Several U.S. Companies	NA	United States		
Red Dog Deposit: Cominco Ltd.	NA	Canada	1985	Zinc, lead, silver—Production planned to commence in 1988; concentrates not expected to be processed in United States; Cominco will be operator.
NANA Regional Corp.	NA	United States		
Santa Fe prospect: Westerly Mine Ltd.	NA	Canada	NA	Gold.
Lacana Mining Inc.	NA	..do.		
Titanium production agreement: RMI Co.	NA	United States	1983	Titanium—RMI is 2d largest U.S. integrated titanium producer. Kobe will process commercially pure titanium produced by RMI at Ashtabula and Niles, OH, for distribution in U.S. markets.
Kobe Steel Ltd.	NA	Japan		
Undesignated: BRGM-COFREMMI	NA	France	NA	Nickel—BRGM, Bureau de Recherches Geologiques et Minieres; COFREMMI, Compagnie Francaise d'Enterprises Minieres Metallurgiques et d'Investissements.
AMAX Inc.	NA	United States		
Barranca Corp. Ltd.	NA	Canada	NA	Gold.
Little Square Mining Co.	NA	United States		

NA Not available. 170 pct owned by the Government of Kuwait. ²Partnership.

APPENDIX B.—DATA SOURCES AND QUALIFICATIONS

Comprehensive data on foreign direct investment (i.e., foreign investment of 10 pct or more by a single foreign person or enterprise in a U.S. business firm) in all domestic business enterprises throughout the entire U.S. economy was collected by the Commerce Department's Bureau of Economic Analysis (BEA) in a benchmark statistical survey in 1980. The mandatory survey covered virtually the entire foreign direct investment universe. Aggregated data from the survey were published in 1983 in a report entitled "Foreign Direct Investment in the United States, 1980." While the published data did not reveal the ownership status of individual firms, they did identify the degree of foreign investment at the "industry" level.

Subsequent to the comprehensive survey, BEA has used annual sample surveys to update its foreign investment data base. Data from both the published benchmark survey and the subsequent sample surveys have been used in this report to develop a statistical profile of the extent of foreign direct investment in the U.S. minerals industry (see table A-1 in appendix A).

Despite the comprehensive coverage of the BEA foreign direct investment survey, all individual company data were considered proprietary, thereby limiting their utility to certain types of analysis. Hence, in order to develop more detailed information on foreign investment in the minerals sector of the economy by individual commodity industry (e.g., steel, aluminum, cement, etc.), data were extracted from numerous published sources such as the Bureau of Mines Minerals Yearbook, the Bureau's bimonthly Minerals and Materials publication, corporate annual reports, and various corporate directories. Such sources typically provide publicly available information on parent-affiliate relationships, percent of outstanding stock held,

and commodities or products produced. Through such sources, ownership chains were traced back to the ultimate beneficial foreign owner (see table A-2 in appendix A) and measures of the proportional share of foreign control of U.S. capacity were developed for several mineral commodity industries (see tables A-3 through A-11 in appendix A).

The limitations of data developed from public sources on individual owners must be stressed. While considerable research effort was expended to develop this information, it does not purport to represent complete coverage of all foreign-owned firms in the domestic minerals industry (SIC groups 10, 14, 32, and 33) as much of this information was not available. Coverage is believed to be more complete for the SIC groups 10 and 33 and considerably less so for SIC groups 14 and 32.

In addition, the highly dynamic nature of ownership patterns in the minerals industry must also be stressed. Because individual parent-affiliate relationships and the exact percentage of outstanding stock held are constantly changing, the detailed data that are presented in this report are particularly perishable.

One further qualification that should be noted in interpreting the data in this report concerns the management style of many foreign owners of U.S. affiliates. Very often, in absentia overseas investors will grant their U.S. executives considerably more freedom to run their businesses than would domestic corporate owners. This is due to obvious geographic, linguistic, and cultural differences as well as the presumed superior knowledge of the local executive concerning his or her own domestic market. Thus, the influence of foreign investors on U.S. business operations is often not as significant as might be inferred from a listing of percentage of stock owned.

APPENDIX C.—GLOSSARY

Affiliate.—A business enterprise in which at least 10 pct or more of its voting securities are directly or indirectly owned or controlled by a person of another country.

Business enterprise.—Any organization, association, branch, or venture that exists for profitmaking purposes or to otherwise secure economic advantage.

Foreign direct investment in the United States.—Ownership or control, directly or indirectly by a foreign person or entity of 10 pct or more of the voting securities of an incorporated U.S. business enterprise or an equivalent interest in an unincorporated U.S. business enterprise.¹

Metal mining group.—Includes establishments primarily engaged in mining, developing, or exploring for metallic minerals (ores).

Nonmetallic mining group.—Includes establishments primarily engaged in mining or quarrying, developing mines, or exploring for nonmetallic minerals, except fuels.

Person.—Any individual, branch, partnership, association, associated group, estate, trust, corporation, or other organization (whether or not organized under the laws of any State), and any government (including a foreign government, the U.S. Government, a State or local government, and any agency, corporation, financial institution, or other entity or instrumentality thereof, including a government-sponsored agency).

Portfolio investment.—Ownership of less than 10 pct of the voting securities of a U.S. company.²

¹When used in this report, terms such as foreign investment, foreign ownership, and foreign-owned refer specifically to foreign direct investment (vis-a-vis portfolio investment), unless otherwise stated.

²The distinction between foreign direct investment and portfolio investment is made in order to establish the point at which the foreign investor gains a degree of control sufficient to influence investment, production, marketing, or other major decisions affecting the firm. Ownership of less than 10 pct of a company's stock is considered merely a financial hedge in which case the shareholder's principal gain is expected to come through dividends and/or sale of the stock at a later date. Portfolio investment is not deemed to carry any influence, although it may signal the future intentions of the investor. To monitor potential takeovers, the U.S. Securities and Exchange Commission requires that investors report purchases of 5 pct or more of the stock in a company or purchases of stock that bring the total shares of a single holder to 5 pct or more of the outstanding stock in a company.

Primary metal group.—Includes establishments engaged in the smelting and refining of ferrous and nonferrous metals from ores, pig or scrap. It also includes those establishments engaged in the rolling, drawing and alloying of ferrous and nonferrous metals and the manufacture of castings, nails, spikes and insulated wire and cable.

Stone, clay, and glass products group.—Includes establishments engaged in manufacturing flat glass and other glass products, cement, structural clay products, pottery, concrete and gypsum products, cut stone, abrasive and asbestos products, etc. from materials extracted from the earth in the form of stone, clay and sand.

Ultimate beneficial owner.—That person, proceeding up the ownership chain beginning with and including the foreign parent, that is not more than 50 pct owned or controlled by another person. (A person who creates a trust, proxy, power of attorney, arrangement, or device with the purpose or effect of divesting such owner of the ownership of an equity interest as part of a plan or scheme to avoid reporting information, is deemed to be the owner of the equity interest).

U.S. affiliate.—An affiliate in which a foreign person has a direct investment and that is located in the United States.

U.S. corporation.—A business enterprise incorporated in the United States.

U.S. minerals industry.—Refers collectively to business establishments classified into one or more of the following four SIC groups:

Industry	Major group
Metal mining	10
Nonmetallic minerals, except fuels	14
Stone, clay, glass, and cement products	32
Primary metals	33





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